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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,386	03/26/2004	Herbert Hartgrove	PGI6044P2441US	8629

32116 7590 08/12/2005

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER  
500 W. MADISON STREET  
SUITE 3800  
CHICAGO, IL 60661

EXAMINER
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SPERTY, ARDEN B

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/810,386

Applicant(s)

HARTGROVE ET AL.

Examiner

Arden B. Sperty

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**NON-FINAL OFFICE ACTION**

1. Applicant's response, filed 5/19/05, has been entered and carefully considered.

***Election/Restrictions***

2. Applicant's request for examination of the non-elected method claims has been considered, but is not persuasive. Applicant merely states that the claims are "sufficiently closely related as to permit their consideration in this single application." The examiner disagrees as set forth in the restriction requirement.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0132368 to Price et al., in view of US 6,660,503 to Kierulff, as stated in the previous office action.

The Price reference teaches a fabric material comprising nonwoven batting layers sandwiching a ballistic grade layer (See paragraph [0018]). The nonwoven batting layers are fire-resistant since they are made of aramid, modacrylic, and natural fibers (See [0019]). The layers are joined by hydroentangling (See [0027]). While the reference does not specifically disclose lyocell fibers, lyocell is known in the art to be functionally equivalent to the natural fibers taught by Price, a position that is supported by Kierulff, which

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teaches flame retardant fabrics using cotton, linene, lyocell, and others interchangeably. It would have been obvious to one of ordinary skill in the art to substitute lyocell for cotton to improve the hand and softness of a fabric.

5. Amended claims 7 and 8 are further rejected as being unpatentable over the combination of Price and Kierulff. Optimizing the amounts in a blend of fibers, in order to achieve desired properties, is basic in the textile engineering art. The resulting properties are predictable according to the materials used. Absent a showing of unexpected results with the specifically claimed composition, it would have been obvious to one of ordinary skill in the art to modify the fiber blend as necessary to achieve desired properties.

6. Claims 6 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price and Kierulff, as stated with regard to claim 5 above, and further in view of US Pub. No. 2002/002764 to Putnam et al. The Putnam reference qualifies under the 35 USC 102(b) statute, thus the rejection cannot be overcome by invocation of 35 USC 103(c).

7. The combination of Price and Kierulff teaches the hydroentangled material as stated previously. The combination is not concerned with patterning or imparting a three-dimensional image to the material. Although the references are not specifically concerned with imparting an image by hydroentangling, doing so would have been obvious to one of ordinary skill in the art motivated by a desire for improved aesthetic properties (Putnam, para. 3 and throughout). Absent a showing of unexpected results imparted by the three-dimensional imaging process, imparting aesthetic elements by known means would have been obvious to one of ordinary skill in the art.

8. Further, optimizing the amounts in a blend of fibers, in order to achieve desired properties, is basic in the textile engineering art. The resulting properties are predictable according to the materials used. Absent a showing of unexpected results with the specific compositions of claims 9 and 10, it would have been obvious to one of ordinary skill in the art to modify the fiber blend as necessary to achieve desired properties.

### ***Response to Arguments***

9. The 35 USC 103(a) rejection of claims 5-6 as being unpatentable over Murphy in view of Kierulff, and further in view of Rivera, is withdrawn per Applicant's invocation of statute 35 USC 103(c).

10. Applicant's arguments, regarding the 35 USC 103(a) rejection of claim 5 as being unpatentable over Price in view of Kierulff, have been fully considered but they are not persuasive. Applicant argues that Price does not teach two nonwoven layers, however the invention of Price clearly includes two nonwoven layers with woven layers sandwiched therebetween, as can be seen in Figure 1. Applicant does not argue the combination of Price and Kierulff.

11. The 35 USC 103(a) rejection of claim 6 as being unpatentable over Price in view of Kierulff, and further in view of Rivera, is withdrawn per Applicant's invocation of statute 35 USC 103(c).

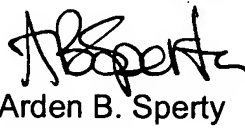
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arden B. Sperty whose telephone number is (571)272-1543. The examiner can normally be reached on M-Th, 08:00-16:00.

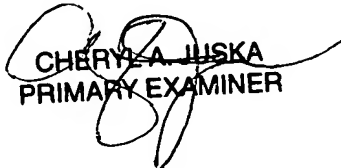
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571)272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Arden B. Sperty  
Examiner  
Art Unit 1771

Aug 10, 2005

  
CHERYL A. JUSKA  
PRIMARY EXAMINER